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Title of the Invention: Inspection Device for Printed Material

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1. TITLE OF THE INVENTION

Inspection Device for Printed Material

2. SCOPE OF CLAIMS OF UTILITY MODEL REGISTRATION]

[CLAIM 1]

A device for inspecting contamination, break and misalignment of printed material, characterized in that the device includes means for illustrating failure place in the place of sheet, which is determined as failure, and means for typing failure place in the blank space.

3. DETAILED DESCRIPTION OF THE INVENTION]

[Industrial Technical Field]

The present invention relates to a device for inspecting failure of printed material.

[Prior Art]

Conventionally, this type of inspecting device measure the strength of reflection light or transmission light by using various photoelectric conversion detectors, and determines printed material as accepted/failure printing by considering the difference between normal pattern and the measured result or comparing the normal pattern with the measured result, and paper ejecting devices in accordance with the accepted/failure printing.

[Problem to be Solved by the Invention]

In the prior art inspection device for inspecting failure of printed material, paper ejecting devices are merely provided in accordance with the accepted/failure printing. Therefore, there is a possibility that failure paper is determined as accepted printing, and there is a possibility that accepted paper is determined as failure printing. Usually, it should be prevented failure paper is determined as accepted printing, as much as possible. Therefore, accepted paper is often determined as failure printing. The more detection accuracy is increased, the more this tendency is significant. However, since the inspection of printing material is often in the final process, nearly finished printing material is discarded without being used. This discard leads waste, and disadvantageously requires manpower for visually inspecting printing material again.

The object of the present invention is to provide a device for inspecting printed material, which overcome the above problem.

[Means for Solving the Problem]

The present invention is a device for inspecting contamination, break and misalignment of printed material, characterized in that the device includes means for illustrating failure place in the place of sheet, which is determined as failure, and means for typing failure place in the blank space of the printed material.

[Embodiments]

One embodiment of the present invention will be explained by using the drawings, as follows.

In Fig. 1, the following are disposed along a paper transport path R which extends from a paper feeding portion 1a to a paper ejecting portion 1b; a detector 3, which optically scans inspection surfaces of printed materials 2a, 2b, 2c, 2d; a printer 5, which types failure place in the blank space of the printed material; a accepted paper accumulation pile 7 and failure paper accumulation pile 8 disposed in the paper

ejecting portion; an inspection device which determines whether the paper is acceptance or failure, based on the output signal of the detector 3, and then issues a typing command to the printer in the case of determining the paper as failure; and a display device 6 such as CRT, which illustrates the printing failure place on a display when it receives the output of the inspection device 4.

Printed materials 2a, 2b, 2c, 2d, which are fed from a paper feeding portion 1a, are scanned by a detector 3. An inspection device 4 determines whether the printed material is acceptable or failed based on the output signal of the detector 3. A mark indicating the printing failure place is printed on a blank portion of the printing failure material while an indicating device such as a CRT illustrates the printing failure place. On the other hand, the failure place is illustrated in the display device 6 such as CRT. Printed materials, which are inspected in this way, are sorted and accumulated in the accepted paper accumulation pile 7 or the failure paper accumulation pile 8 in the paper ejecting portion 1b.

[Advantageous Effect of the invention]

As explained above, according to the present invention, failure paper is prevented from being overlooked as much as possible, and if accepted paper is erroneously determined as failure printing, the failure place is illustrated in a display device, and therefore even inexperienced person can easily determine the failure place visually again, and if the failure occurs continuously, the inexperienced person can determine the printing failure place, which is typed in the printing blank space. Accordingly, the present invention provides the effect which can stably inspect printing materials without manpower as much as possible, in an inexpensive inspection device.

4. BRIEF DESCRIPTION OF THE DRAWINGS]

Fig. 1 is a view showing an example of device for inspecting printed materials of the present invention.

1a Paper feeding portion

- 1b Paper ejecting portion
- 2a Printed material
- 2b Printed material
- 2c Printed material
- 2d Printed material
- 3 Detector
- 4 Inspection device
- 5 Printer
- 6 Display device
- 7 Accepted paper accumulation pile
- 8 Failure paper accumulation pile